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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,899	04/05/2004	Naoaki Yamaguchi	0756-7291	2636
31780	7590	06/24/2005	EXAMINER	
ERIC ROBINSON PMB 955 21010 SOUTHBANK ST. POTOMAC FALLS, VA 20165			LEE, CALVIN	
			ART UNIT	PAPER NUMBER
			2818	

DATE MAILED: 06/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary

Application No.

10/816,899

Applicant(s)

YAMAGUCHI et al.

Examiner

Lee, Calvin

Art Unit

2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
 Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2005 (Election).
 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) 1 and 2 is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 3-20 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 4/5/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 4/5/04.
 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) ☐ Notice of Informal Patent Application (PTO-152)
 6) ☐ Other: _____.

OFFICE ACTION

Response to Election

1. The election without traverse of claims 3-20, dated June 7, 2005 is acknowledged.

Double Patenting

2. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a T Disclaim cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

3. Claims 3-20 are rejected under 35 USC 101 as claiming the same invention as that of claims 1 through 18 of prior US Patent No. 6,716,283. This is a double patenting rejection.

The Examiner sees nothing different between the two sets of claims, except for the statement "method for manufacturing a semiconductor device" in the pending claims comprises "an optical processing method" in the conflicting claims. Moreover, the process step "forming a semiconductor film formed over a substrate" in the pending claims means the same as "preparing a semiconductor film over a substrate" in the conflicting claims.

Claim Rejections - 35 U.S.C. § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 (e) that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

5. Claims 3-20 are rejected under 35 U.S.C. 102(e) as being anticipated by *Imahashi et al.*

a) *Imahashi et al* (US 5,529,630) discloses a method for forming a semiconductor device:
-preparing a semiconductor film 2 (amorphous silicon) over a substrate 1 [col.10, ln.46]
-irradiating a laser light 3 onto said semiconductor film to crystallize said semiconductor film [step S11 in col. 11, lns.31-39]

-controlling an irradiation energy of said laser light based on a reactive index [step S2 in col. 11, lns.40-64] of said semiconductor film on which said laser light has been irradiated so that the refractive index of said semiconductor film is within a predetermined range (the desired crystallinity).

Imahashi et al discloses control based on the band-gap spectral reflectance, which inherently encompasses the broadly cited control "based" on the refractive index since the resistance is based on the refractive index. The refractive index is inherently within a predetermined range because the crystallinity inherently has a predetermined refractive index.

Imahashi et al also discloses measuring the spectral reflectance to control irradiation for crystallization. *Imahashi et al* compares graphs of spectral reflectance, but does not take the extra step of measuring the refractive index by an ellipsometer.

b) As to claims 7 and 11, *Imahashi et al* discloses to repeatedly irradiate (to pulse) the laser light [col.5, lines 28-38]. The pulses may have varying densities [col.5, lns.34-38]. Note further that claim 11 does not cite that the first and second lights are different.

c) As to claims 4, 8, 12, *Imahashi et al* discloses that the laser light is KJF or an XeCl laser [col. 5, lns.28-29].

d) As to claims 5, 9, 13, *Imahashi et al* discloses to scan the laser light [col.5, lns.16-20].

Contact Information

6. Any inquiry concerning this communication from the Examiner should be directed to *Calvin Lee* at (571) 272-1896 on Mondays thru Thursdays 6:30-4:30PM. If attempts to reach the examiner by telephone are unsuccessful, Art Unit 2818's Supervisory Patent Examiner *David Nelms* can be reached at (571) 272-1787. The fax phone number for the organization (where this application is assigned to) is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system at <http://pair-direct.uspto.gov>. Should you have questions on access to the PAIR system, contact the Electronic Business Center at (866) 217-9197.



Date: June 22, 2005



David Nelms
Supervisory Patent Examiner
Technology Center 2800